

Volatiles emitted by 'Fragrant Cloud' (FC) and 'Golden Gate' (GG) flowers. Headspace of intact flowers was trapped, eluted and concentrated. The volatile compounds collected from the headspace were analyzed on a HP-GCD apparatus equipped with an Rtx-5SIL MS fused-silica capillary column. Identification of the main components was done by comparison of mass spectra and retention time data with those of authentic available samples and supplemented with a NIST98 and Quadlib 1607 libraries. For quantitative analyses, 10 µg/ml ethyl myristate as an internal standard was used. Average, maximum and minimum values are given. Results are average of at least 5 replicates.

Compounds	Fragrant Cloud				Golden Gate				
	ug/flower/ 24h	SE	Min	Max	ug/flower/24h	SE	Min	Max	
Aromatic and aliphatic alcohols									
phenethyl alcohol	35.94	11.7	6.4	75.3					
benzyl alcohol	0.42	0.2	0.0	1.2					
2-ethyl-1-hexanol	0.18	0.2	0.0	0.9					
Total aromatic and aliphatic alcohols	36.55				0.00				
Oxyginated Monoterpenes									
Geraniol	0.09	0.1	0.0	0.5					
citronellol	11.65	4.3	1.3	24.1					
citral	0.08	0.1	0.0	0.4					
Total oxyginated Monoterpenes	11.83				0.00				
Other Monoterpenes									
α - pinene	2.36	1.7	0.0	9.8					
β - pinene	1.58	1.2	0.0	7.0					
d-limonene	0.09	0.1	0.0	0.4					
β -ocimene	1.71	1.4	0.0	8.0					
Total other Monoterpenes	5.74				0.00				
Total Monoterpenes	17.57				0.00				
Sesquiterpenes									
α -cubebene	1.23	1.1	0.0	5.9					
β -elmene	0.11	0.1	0.0	0.5					
trans-caryophyllene	0.00	0.0	0.0	0.0	0.25	0.1	0.0	0.8	
germacrene D	6.23	1.6	0.8	11.8					
bicyclosesquiphellandrene	0.18	0.1	0.0	0.6					
α -muurolene	0.16	0.1	0.0	0.8					
δ - cadinene	0.19	0.2	0.0	1.0					
α - copaene	0.16	0.1	0.0	0.8					
β - cubebene	0.04	0.0	0.0	0.2					
δ -cadinene	1.86	1.5	0.0	8.2					
bicycloelemene	0.04	0.0	0.0	0.2					
bicyclogermacrene	0.11	0.1	0.0	0.5					
caryophyllene-oxide					0.04	0.0	0.0	0.3	
α -farnesene					0.03	0.0	0.0	0.2	
Total sesquiterpenes	10.31				0.32				
Other Terpenes									
β - ionone	1.69	1.2	0.0	6.7					
Total other Terpenes	1.69				0.00				
Total Terpenes	29.57								
Esters									
Citronellyl acetate	3.51	1.5	0.0	8.3					
neryl acetate	0.11	0.1	0.0	0.5					
Geranyl acetate	2.14	1.1	0.0	6.4					
3-Hexen 1-ol, acetate	28.69	23.1	1.2	129.7					
n-hexyl acetate	11.17	7.3	1.2	42.9					

trans 2-hexenyl acetate	2.05	5.5	2.2	0.0					
phenethyl acetate	12.79	6.2	1.7	35.5					
Total esters	60.47				0.00				
Methoxylated phenols									
3,5 dimethoxytoluene					25.72	7.9	6.5	64.9	
1-ethyl-4-methoxybenzene	0.15	0.1	0.0	0.7	6.40	2.4	0.0	17.8	
1,4-dimethoxybenzene					0.62	0.6	0.0	4.4	
Total Methoxylated phenols	0.15				32.74				
Total Volatiles	126.73				33.06				